



IFWO

## RAW SEQUENCE LISTING

DATE: 08/30/2004

PATENT APPLICATION: US/10/729,441

TIME: 15:07:38

Input Set : A:\10-729,441 Sequence Listing.txt

Output Set: N:\CRF4\08302004\J729441.raw

3 <110> APPLICANT: ImmunoGen, Inc.  
 5 <120> TITLE OF INVENTION: ANTI-IGF-I RECEPTOR ANTIBODY  
 7 <130> FILE REFERENCE: A8689  
 9 <140> CURRENT APPLICATION NUMBER: 10/729,441  
 10 <141> CURRENT FILING DATE: 2003-12-08  
 12 <150> PRIOR APPLICATION NUMBER: 10/170,390  
 13 <151> PRIOR FILING DATE: 2002-06-14  
 15 <160> NUMBER OF SEQ ID NOS: 96  
 17 <170> SOFTWARE: PatentIn version 3.2  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 5  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Artificial Sequence  
 24 <220> FEATURE:  
 25 <223> OTHER INFORMATION: antibody heavy chain complementarity determining region  
 27 <400> SEQUENCE: 1  
 29 Ser Tyr Trp Met His  
 30 1 5  
 33 <210> SEQ ID NO: 2  
 34 <211> LENGTH: 17  
 35 <212> TYPE: PRT  
 36 <213> ORGANISM: Artificial Sequence  
 38 <220> FEATURE:  
 39 <223> OTHER INFORMATION: antibody heavy chain complementarity determining region  
 41 <400> SEQUENCE: 2  
 43 Glu Ile Asn Pro Ser Asn Gly Arg Thr Asn Tyr Asn Glu Lys Phe Lys  
 44 1 5 10 15  
 47 Arg  
 51 <210> SEQ ID NO: 3  
 52 <211> LENGTH: 15  
 53 <212> TYPE: PRT  
 54 <213> ORGANISM: Artificial Sequence  
 56 <220> FEATURE:  
 57 <223> OTHER INFORMATION: antibody heavy chain complementarity determining region  
 59 <400> SEQUENCE: 3  
 61 Gly Arg Pro Asp Tyr Tyr Gly Ser Ser Lys Trp Tyr Phe Asp Val  
 62 1 5 10 15  
 65 <210> SEQ ID NO: 4  
 66 <211> LENGTH: 16  
 67 <212> TYPE: PRT  
 68 <213> ORGANISM: Artificial Sequence  
 70 <220> FEATURE:  
 71 <223> OTHER INFORMATION: antibody light chain complementarity determining region

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73 <400> SEQUENCE: 4
75 Arg Ser Ser Gln Ser Ile Val His Ser Asn Val Asn Thr Tyr Leu Glu
76 1          5          10          15
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 7
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: antibody light chain complementarity determining region
87 <400> SEQUENCE: 5
89 Lys Val Ser Asn Arg Phe Ser
90 1          5
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 9
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: antibody light chain complementarity determining region
101 <400> SEQUENCE: 6
103 Phe Gln Gly Ser His Val Pro Pro Thr
104 1          5
107 <210> SEQ ID NO: 7
108 <211> LENGTH: 124
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: antibody heavy chain
115 <400> SEQUENCE: 7
117 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala
118 1          5          10          15
121 Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
122          20          25          30
125 Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
126          35          40          45
129 Gly Glu Ile Asn Pro Ser Asn Gly Arg Thr Asn Tyr Asn Glu Lys Phe
130          50          55          60
133 Lys Arg Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
134 65          70          75          80
137 Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Phe
138          85          90          95
141 Ala Arg Gly Arg Pro Asp Tyr Tyr Gly Ser Ser Lys Trp Tyr Phe Asp
142          100          105          110
145 Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser
146          115          120
149 <210> SEQ ID NO: 8
150 <211> LENGTH: 113
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:

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155 <223> OTHER INFORMATION: antibody light chain
157 <400> SEQUENCE: 8
159 Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
160 1 5 10 15
163 Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
164 20 25 30
167 Asn Val Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
168 35 40 45
171 Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
172 50 55 60
175 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Arg Ile
176 65 70 75 80
179 Ser Arg Val Glu Ala Glu Asp Leu Gly Ile Tyr Tyr Cys Phe Gln Gly
180 85 90 95
183 Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
184 100 105 110
187 Arg
191 <210> SEQ ID NO: 9
192 <211> LENGTH: 113
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: humanized light chain variable region
199 <400> SEQUENCE: 9
201 Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
202 1 5 10 15
205 Asp Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
206 20 25 30
209 Asn Val Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
210 35 40 45
213 Pro Arg Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
214 50 55 60
217 Asp Arg Phe Ser Gly Ser Gly Ala Gly Thr Asp Phe Thr Leu Arg Ile
218 65 70 75 80
221 Ser Arg Val Glu Ala Glu Asp Leu Gly Ile Tyr Tyr Cys Phe Gln Gly
222 85 90 95
225 Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
226 100 105 110
229 Arg
233 <210> SEQ ID NO: 10
234 <211> LENGTH: 113
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: humanized light chain variable region
241 <400> SEQUENCE: 10
243 Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
244 1 5 10 15
247 Asp Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser

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```

248          20          25          30
251 Asn Val Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
252          35          40          45
255 Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
256          50          55          60
259 Asp Arg Phe Ser Gly Ser Gly Ala Gly Thr Asp Phe Thr Leu Arg Ile
260 65          70          75          80
263 Ser Arg Val Glu Ala Glu Asp Leu Gly Ile Tyr Tyr Cys Phe Gln Gly
264          85          90          95
267 Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
268          100          105          110
271 Arg
275 <210> SEQ ID NO: 11
276 <211> LENGTH: 113
277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: humanized light chain variable region
283 <400> SEQUENCE: 11
285 Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
286 1          5          10          15
289 Asp Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
290          20          25          30
293 Asn Val Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
294          35          40          45
297 Pro Arg Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
298          50          55          60
301 Asp Arg Phe Ser Gly Ser Gly Ala Gly Thr Asp Phe Thr Leu Arg Ile
302 65          70          75          80
305 Ser Arg Val Glu Ala Glu Asp Leu Gly Ile Tyr Tyr Cys Phe Gln Gly
306          85          90          95
309 Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
310          100          105          110
313 Arg
317 <210> SEQ ID NO: 12
318 <211> LENGTH: 113
319 <212> TYPE: PRT
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: humanized light chain variable region
325 <400> SEQUENCE: 12
327 Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
328 1          5          10          15
331 Asp Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
332          20          25          30
335 Asn Val Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
336          35          40          45
339 Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
340          50          55          60

```

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Input Set : A:\10-729,441 Sequence Listing.txt

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```

343 Asp Arg Phe Ser Gly Ser Gly Ala Gly Thr Asp Phe Thr Leu Arg Ile
344 65              70              75              80
347 Ser Arg Val Glu Ala Glu Asp Leu Gly Ile Tyr Tyr Cys Phe Gln Gly
348              85              90              95
351 Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
352              100              105              110
355 Arg
359 <210> SEQ ID NO: 13
360 <211> LENGTH: 124
361 <212> TYPE: PRT
362 <213> ORGANISM: Artificial Sequence
364 <220> FEATURE:
365 <223> OTHER INFORMATION: humanized heavy chain variable region
367 <400> SEQUENCE: 13
369 Gln Val Gln.Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
370 1              5              10              15
373 Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
374              20              25              30
377 Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
378              35              40              45
381 Gly Glu Ile Asn Pro Ser Asn Gly Arg Thr Asn Tyr Asn Gln Lys Phe
382              50              55              60
385 Gln Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
386 65              70              75              80
389 Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Phe
390              85              90              95
393 Ala Arg Gly Arg Pro Asp Tyr Tyr Gly Ser Ser Lys Trp Tyr Phe Asp
394              100              105              110
397 Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
398              115              120
401 <210> SEQ ID NO: 14
402 <211> LENGTH: 46
403 <212> TYPE: DNA
404 <213> ORGANISM: Artificial Sequence
406 <220> FEATURE:
407 <223> OTHER INFORMATION: degenerate 3' light chain PCR primer - HindKL
409 <400> SEQUENCE: 14
410 tatagagctc aagcttggat ggtgggaaga tggatacagt tggtgc              46
413 <210> SEQ ID NO: 15
414 <211> LENGTH: 36
415 <212> TYPE: DNA
416 <213> ORGANISM: Artificial Sequence
418 <220> FEATURE:
419 <223> OTHER INFORMATION: degenerate 3' heavy chain PCR primer- Bgl2IgG1
421 <400> SEQUENCE: 15
422 ggaagatcta tagacagatg ggggtgtcgt tttggc              36
425 <210> SEQ ID NO: 16
426 <211> LENGTH: 30
427 <212> TYPE: DNA

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## RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 08/30/2004

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Input Set : A:\10-729,441 Sequence Listing.txt

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:18; N Pos. 18

Seq#:19; N Pos. 18

Seq#:69; Xaa Pos. 28,101

Seq#:81; Xaa Pos. 20,34,43,50,52,54,57,59,99,100,103,104,105,106,107,108

Seq#:81; Xaa Pos. 116

## VERIFICATION SUMMARY

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Input Set : A:\10-729,441 Sequence Listing.txt

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L:464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:1642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:16  
L:1662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:96  
L:2207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:16  
L:2211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:32  
L:2215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:48  
L:2227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:96  
L:2231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:112